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EXAMINER

SHAH, SAMIR

ART UNIT	PAPER NUMBER
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1794

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01/25/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	10/573,241		MUSSIG ET AL.	
	Examiner		Art Unit	
	SAMIR SHAH		1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 15-18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20060323</u> . | 6) <input type="checkbox"/> Other: _____. |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of group I in the reply filed on October 20, 2009 is acknowledged. The traversal is on the ground(s) that according to MPEP §803, "if the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits even though it includes claims to independent or distinct inventions." This is not found persuasive because, as set forth in paragraph 4 of the office action mailed October 20, 2009, there would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply:

- a. the inventions have acquired a separate status in the art in view of their different classification;
- b. the inventions have acquired a separate status in the art due to their recognized divergent subject matter;
- c. the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);
- d. the prior art applicable to one invention would not likely be applicable to another invention;
- e. the inventions are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

2. The requirement is still deemed proper and is therefore made FINAL.

3. Claims 15-18 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention groups II-V, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on December 21, 2009.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

5. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to

be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

6. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-2 and 6-12 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-9 and 12-14 of copending Application No. 10/573,244. Although the conflicting claims are not identical, they are not patentably distinct from each other because the scope of application 10/573,241 is generic to that of the scope of the claims of application 10/573,244.

<i>Current Appl. 10/573,241</i>	<i>Co-pending Appl. 10/573,244</i>
1. An age-resistant, optionally halogen-free, polyolefin wrapping foil, comprising at least 4 phr of a primary antioxidant or at least 0.3 phr of a combination of primary and secondary antioxidants, the primary and secondary antioxidant function optionally being present in different molecules or to be united in one molecule 2. The wrapping foil of claim 1, wherein the amount of secondary antioxidant is at least 0.5 phr.	1. A carbon black-filled, age-resistant, polyolefin wrapping foil, comprising a carbon black having a pH of 6 to 8. 3. The wrapping foil of claim 1, wherein the wrapping foil is halogen-free. 11. The wrapping foil of claim 1, which contains at least 4 phr of a primary antioxidant or at least 0.3 phr of a combination of primary and secondary antioxidants, it also being possible for the primary and secondary antioxidant function to be united in one molecule. 3. The wrapping foil of claim 1, wherein the wrapping foil is halogen-free.
6. The wrapping foil of claim 1, comprising a polypropylene copolymer and also ethylene-propylene copolymers from the classes of the EPM and EPDM.	9. The wrapping foil of claim 1, which comprises polypropylene polymer and also ethylene-propylene copolymers from the classes of EPM and EPDM polymers. 8. The wrapping foil of claim 1, wherein the polyolefin contains propylene as

	monomer .
7. The wrapping foil of claim 1, which has a thermal stability of at least 105.degree C., and exhibits a breaking elongation of at least 100% after 20 days' storage at 136.degree. C., a compatibility, on storage on a cable with polyolefin insulation, of at least 105.degree. C. after 3000 hours, a compatibility, on storage on a cable with polyolefin insulation, of 125.degree. C. after 2000 hours, and/or a heat resistance of 170.degree. C. (30 min).	12. The wrapping foil of claim 1, wherein the wrapping foil has a heat stability of at least 105.degree. C. after 2000 hours, has a breaking elongation of at least 100% after 20 days of storage at 136.degree C., has a compatibility, when stored on a cable with a polyolefin insulation, of at least 105.degree. C. after 3000 hours, has a compatibility, when stored on a cable with a polyolefin insulation, of 125.degree. C. after 2000 hours, achieves 140.degree. C. after 168 hours and/or achieves a heat resistance of 170.degree. C. (30 minutes).
8. The wrapping foil of claim 1, which has on one or both sides a layer of adhesive, and optionally a primer layer between foil and adhesive layer, the amount of the adhesive layer being in each case 10 to 40 g/m.sup.2, and the adhesive exhibiting a bond strength to steel of 1.5 to 3 N/cm, an unwind force of 1.2 to 6.0 N/cm at 300 mm/min unwind speed, and/or a holding power of more than 150 min.	5. The wrapping foil of claim 1, which has on one or both side a layer of adhesive, and optionally has a primer layer between film and adhesive layer, the amount of the adhesive layer being in each case 10 to 40 g/m.sup.2 and the adhesive exhibiting a bond strength to steel of 1.5 to 3 N/cm, an unwind force of 1.2 to 6.0 N/cm at 300 mm/min unwind speed, and/or a holding power of more than 150 min.
9. The wrapping foil of claim 1, which comprises a solvent-free pressure-sensitive adhesive which is produced by coextrusion, melt coating or dispersion coating, this adhesive being joined to a surface of the carrier film by means of flame or corona pretreatment or of an adhesion promoter layer which is applied by coextrusion or coating.	6. The wrapping foil of claim 1, which comprises a solvent-free pressure-sensitive adhesive which is produced by coextrusion, melt coating or dispersion coating, this adhesive being joined to a surface of the carrier foil by means of flame or corona pretreatment or of an adhesion promoter layer which is applied by coextrusion or coating.
10. The wrapping foil of claim 1, which comprises at least one polyolefin having a flexural modulus of less than 900 MPa, and/or a crystallite melting point of between 120.degree. C. and 166.degree. C.	13. The wrapping foil of claim 1, which comprises at least one polypropylene having a flexural modulus of less than 900 MPa, and/or a crystallite melting point of between 120.degree. C. and 166.degree. C.
11. The wrapping foil of claim 1, wherein a flame-retardant filler is added at 70 to 200 phr.	4. The wrapping foil of claim 1, wherein the wrapping foil is flame-retarded. 14. The wrapping foil of claim 1, which comprises a flame-retardant filler is added at 70 to 200 phr.

12. The wrapping foil of claim 1, which comprises a fraction of carbon black of at least 5 phr, the carbon black optionally having a pH of 6 to 8.	1. A carbon black-filled, age-resistant, polyolefin wrapping foil, comprising a carbon black having a pH of 6 to 8. 7. The wrapping foil of claim 1 wherein the fraction of carbon black is at least 5 phr. 2. The wrapping foil of claim 1, wherein the wrapping foil comprises thermal black, acetylene black or lamp black.
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8. Prior to setting force the rejection it is noted that there is a significant overlap between present claims and co-pending claims.

9. Regarding claim 1 of the instant application, it is noted that the co-pending application's claims 1 and 11 are identical to present claim 1 except for wrapping foil is carbon black filled. However, in light of the open language of the present claims, i.e. comprising, it is clear that the claims are open to the inclusion of additional component as disclosed in the copending claims.

10. Therefore, it is clear that one of ordinary skill would arrive at the present claims from the copending ones.

11. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

12. Claims 1-2 and 6-12 are directed to an invention not patentably distinct from claims 1-9, and 12-14 of commonly assigned 10/573,244. Specifically, although the conflicting claims are not identical, they are not patentably distinct for the reasons set forth in paragraphs 8-9 above.

13. The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP

Chapter 2300). Commonly assigned 10/573,244, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

14. A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

Claim Rejections - 35 USC § 112

15. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

16. Claims 4-8 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

17. Claim 4 recites "in each case" in line 2. It is not clear what does it mean by each case. Claim 4 recites "from the classes of the sulfur compounds and the phosphites". It is not clear what "classes" are being referred to or what they encompass. Furthermore, claim 4 recites "low" volatility given that it is not clear what is meant by "low". The term "low" in claim 4 is a relative term which renders the claim indefinite. The term "low" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

18. Claim 5 recites "a combination of CAS 6683-19-8, CAS 31570-04-4". What do these numbers represent? Are there any chemical names for these CAS numbers? Further, claim 5 recites "and/or". It is not clear whether it is "A or B or C" or "A and (B or C)". Similar confusion arises with respect to claims 7-8 and 10 which recite the same "and/or" claim language as claim 5.

19. Claim 6 recites "EPM" in line 2. It is not clear what this abbreviation stands for?

Claim Rejections - 35 USC § 102

20. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

21. **Claims 1 and 6** are rejected under 35 U.S.C. 102(b) as being anticipated by Nagano (US 4397916).

22. Regarding claim 1, Nagano discloses laminated multilayer film (title), e.g. wrapping foil, wherein layer (A) is made of polyolefin (column 2, lines 50-51) and it comprises 0.01 to 5 % of primary antioxidant (column 7, lines 13-14). Nagano discloses same composition as presently claimed therefore it would inherently be age resistant film.

23. While there is no disclosure that the multilayer film is a wrapping film as presently claimed, applicants attention is drawn to MPEP 2111.02 which states that "if the body of a claim fully and intrinsically sets forth all the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction". Further, MPEP 2111.02 states that statements in the preamble reciting the purpose or intended use of the claimed invention must be evaluated to determine whether the purpose or intended use results in a structural difference between the claimed invention and the prior art. Only if such structural difference exists, does the recitation serve to limit the claim. If the prior art structure is capable of performing the intended use, then it meets the claim.

24. It is the examiner's position that the preamble does not state any distinct definition of any of the claimed invention's limitations and further that the purpose or intended use, i.e. wrapping foil, recited in the present claims does not result in a structural difference between the presently claimed invention and the prior art multilayer

film and further that the prior art structure which is a multilayer film identical to that set forth in the present claims is capable of performing the recited purpose or intended use

25. Regarding claim 6, Nagano discloses laminated multilayer film wherein layer (A) comprises polypropylene copolymer (column 4, lines 43-50), and ethylene-propylene copolymers rubber which are classes of the EPM and EPDM (column 4, lines 51-65).

Claim Rejections - 35 USC § 102

26. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

27. Claims 1, 3-4, 7, and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by McAmish et al. (US 2003/0213549).

28. Regarding claim 1, McAmish discloses polyolefin film, e.g. wrapping foil, (title, paragraph 0020) wherein it comprises antioxidants such as Irganox 1010 (primary antioxidant) and Irgafos 168 (secondary antioxidant) are added at a total of about 0.004%(4000/1004000) (paragraph 0082) which anticipates present claimed value (at

least 0.003% (0.3/100.0)). Since McAmish discloses same antioxidants as presently claimed, the film would inherently be age resistant.

29. While there is no disclosure that the polyolefin film is a wrapping film as presently claimed, applicants attention is drawn to MPEP 2111.02 which states that "if the body of a claim fully and intrinsically sets forth all the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction". Further, MPEP 2111.02 states that statements in the preamble reciting the purpose or intended use of the claimed invention must be evaluated to determine whether the purpose or intended use results in a structural difference between the claimed invention and the prior art. Only if such structural difference exists, does the recitation serve to limit the claim. If the prior art structure is capable of performing the intended use, then it meets the claim.

30. It is the examiner's position that the preamble does not state any distinct definition of any of the claimed invention's limitations and further that the purpose or intended use, i.e. wrapping foil, recited in the present claims does not result in a structural difference between the presently claimed invention and the prior art polyolefin film and further that the prior art structure which is a polyolefin film identical to that set forth in the present claims is capable of performing the recited purpose or intended use.

31. Regarding claims 3-4, McAmish discloses polyolefin film wherein primary antioxidant is Irganox 1010 and secondary antioxidant is Irgafos 168. Since McAmish

discloses same antioxidants as present invention discloses, it would inherently possess same properties as presently claimed.

32. Regarding claim 7, McAmish discloses polyolefin film as presently claimed, therefore, it would inherently possess same properties as presently claimed.

33. Regarding claim 14, McAmish discloses polyolefin film wherein the film does not require having plasticizer. Therefore, it is clear that the polyolefin film, e.g. wrapping foil would inherently have fogging number above 90 %.

Claim Rejections - 35 USC § 103

34. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

35. **Claims 2 and 5** are rejected under 35 U.S.C. 103(a) as being unpatentable over McAmish et al. (US 2003/0213549) in view of Heinz et al. (US 20030181563 A1).

36. Regarding claim 2, McAmish discloses polyolefin film but fails to disclose second antioxidant amount.

37. Heinz discloses halogen free flame resistant polyolefin mixture wherein primary antioxidant is phenolic (paragraph 0028) and second antioxidant is phosphorous or sulfur compound (paragraph 0028) which is added in amount of 0.3 to 6 phr (paragraphs 0031, claim 13) to have thermal stabilization during extrusion and age resistance in air (paragraph 0027).

38. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the amount of second antioxidant as taught by Heinz in the film of McAmish to obtain thermal stabilization during extrusion and age resistance in air.

39. Regarding claim 5, McAmish discloses polyolefin film but fails to disclose metal deactivator.

40. Heinz discloses halogen free flame resistant polyolefin mixture wherein metal deactivator is presented (paragraph 0032).

41. It would have been obvious to one of ordinary skill in the art at the time of the invention to use metal deactivator as taught by Heinz in the film of McAmish to deactivate metal in the film.

42. **Claim 8** is rejected under 35 U.S.C. 103(a) as being unpatentable over McAmish et al. (US 2003/0213549) in view of Kawaguchi et al. (US 5478639).

43. Regarding claim 8, McAmish discloses polyolefin film but fails to disclose the properties of the adhesive layer.

44. Kawaguchi discloses adhesive tape wherein the tape has an adhesive layer on one side (column 5, lines 17-18) and the amount of the adhesive layer is 30 to 300 g/m² (column 5, lines 34-39). Since, Kawaguchi discloses the same amount of the adhesive, it would intrinsically possess same adhesive properties as presently claimed.

45. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the amount of adhesive layer of Kawaguchi in the film of McAmish to obtain effective adhesion.

46. **Claim 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over McAmish et al. (US 2003/0213549) in view of Guldbrandsen et al. (US 6472025 B1).

47. Regarding claim 9, McAmish discloses polyolefin film but fails to disclose solvent free pressure sensitive adhesive.

48. Guldbrandsen discloses solvent free pressure sensitive adhesive wherein it is coated on a substrate (column 2, lines 50-52) which permits cost effective manufacturing (column 2, lines 54-55).

49. It would have been obvious to one of ordinary skill in the art at the time of the invention to use solvent free pressure sensitive adhesive of Guldbrandsen in the film of McAmish to obtain good adhesion and cost effective manufacturing.

50. Although McAmish in view of Guldbrandsen does not disclose coextrusion, melt coating or dispersion coating, it is noted that “[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process”, *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) . Further, “although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product”, *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir.1983). See MPEP 2113.

51. Therefore, absent evidence of criticality regarding the presently claimed process and given that McAmish in view of Guldbrandsen meets the requirements of the claimed solvent free pressure sensitive adhesive, McAmish in view of Guldbrandsen clearly meets the requirements of the present claims.

52. **Claim 10** is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagano (US 4397916) in view of Nakagawa et al. (US 20010031355 A1).

53. Regarding claim 10, Nagano discloses laminated multilayer film wherein layer (A) comprises polypropylene copolymer (column 4, lines 43-50), and ethylene-propylene copolymers but fails to disclose dynamic storage modulus.

54. Nakagawa discloses polypropylene wherein it having dynamic storage modulus of less than 900 MPa (paragraph 0040).

55. Therefore, it would be obvious to control the dynamic storage modulus of Nagano to values including those presently claims in order to provide film that to suppresses thermal deformation (paragraph 0040).

56. **Claims 11-12** are rejected under 35 U.S.C. 103(a) as being unpatentable over McAmish et al. (US 2003/0213549) in view of Nakagawa et al. (US 20010031355 A1).

57. Regarding claims 11-12, McAmish discloses polyolefin film but fails to disclose flame retardant filler and carbon black.

58. Nakagawa discloses adhesive tape substrate (title) wherein the tape comprises flame retardant comprising metal hydroxide (paragraph 0046) and char-forming aid that

is carbon black (paragraph 0052) in amount on 80-200 phr (paragraph 0051) and 0.5 to 10 phr (paragraph 0052) respectively.

59. It would have been obvious to one of ordinary skill in the art at the time of the invention to use flame retardants of Nakagawa in the film of McAmish to prevent damage during open flame.

60. **Claim 13** is rejected under 35 U.S.C. 103(a) as being unpatentable over McAmish et al. (US 2003/0213549) in view of Ueyama et al. (US 6565985 B2).

61. Regarding claim 13, McAmish discloses polyolefin film but fails to disclose but fails to disclose ethylene copolymer density.

62. Ueyama discloses heat shrinkable multilayer film comprising ethylene copolymer (column 6, lines 32-34), having density between 0.890 g/cm^3 to 0.910 g/cm^3 to provide seal strength and heat resistance (column 6, lines 35-37).

63. It would have been obvious to one of ordinary skill in the art at the time of the invention to use low density ethylene copolymer of Ueyama in the film of McAmish to provide seal strength and heat resistance.

64. **Claim 14** is rejected under 35 U.S.C. 103(a) as being unpatentable over McAmish et al. (US 2003/0213549) in view of Mamish et al. (US 6355344 B1).

65. Regarding claim 14, McAmish discloses polyolefin film but fails to disclose fogging number.

66. Mamish discloses non-fogging pressure sensitive adhesive film wherein the plastic base is halogen free and plasticizer free to obtain low fogging number, e.g. at least 60 (column 3, lines 42-43) for recyclability (column 6, lines 32-40) wherein the example one of Mamish shows that the fogging number of base film is 95 (column 10, lines 25-26).

67. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the concept of low fogging number as taught by Mamish in the film of McAmish for recyclability.

68. **Claims 2 and 5** are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagano (US 4397916) in view of Heinz et al. (US 20030181563 A1).

69. Regarding claim 2, Nagano discloses laminated multilayer film but fails to disclose second antioxidant amount.

70. Heinz discloses halogen free flame resistant polyolefin mixture wherein second antioxidant is added in amount of 0.3 to 6 phr (paragraphs 0031, claim 13) to have thermal stabilization during extrusion and age resistance in air (paragraph 0027).

71. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the amount of second antioxidant as taught by Heinz in the film of Nagano to obtain thermal stabilization during extrusion and age resistance in air.

72. Regarding claim 5, Nagano discloses laminated multilayer film but fails to disclose metal deactivator.

73. Heinz free flame resistant polyolefin mixture wherein metal deactivator is presented (paragraph 0032).

74. It would have been obvious to one of ordinary skill in the art at the time of the invention to use metal deactivator as taught by Heinz in the film of Nagano to deactivate metal in the film.

75. **Claim 8** is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagano (US 4397916) in view of Galle et al. (US 2003/0186050 A1).

76. Regarding claim 8, Nagano discloses laminated multilayer film but fails to disclose the properties of the adhesive layer.

77. Galle discloses adhesive film wherein the film has an adhesive layer on one side (paragraph 0052) and it comprises same adhesive compositions as presently disclosed in the specification such as hydrocarbon and crosslinking agent. Furthermore, Galle discloses the amount of the adhesive layer is 10 to 45 g/m² and preferably 13 to 28 g/m² (paragraph 0058). Galle discloses the same compositions and same amount of the adhesive, it would inherently have same adhesive properties as presently claimed.

78. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the adhesive layer of Galle in the film of Nagano so that it can have effective bonding of the adhesive composition to the film (paragraph 0057).

79. **Claim 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagano (US 4397916) in view of Guldbrandsen et al. (US 6472025 B1).

80. Regarding claim 9, Nagano discloses laminated multilayer film with adhesive layer but fails to disclose solvent free pressure sensitive adhesive.

81. Guldbrandsen discloses solvent free pressure sensitive adhesive wherein it is coated on a substrate (column 2, lines 50-52) which permits cost effective manufacturing (column 2, lines 54-55).

82. It would have been obvious to one of ordinary skill in the art at the time of the invention to use solvent free pressure sensitive adhesive of Gulbrandsen in the film of Nagano to obtain good adhesion and cost effective manufacturing.

83. Although Nagano in view of Guldbrandsen does not disclose coextrusion, melt coating or dispersion coating, it is noted that “[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process”, *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) . Further, “although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product”, *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir.1983). See MPEP 2113.

84. Therefore, absent evidence of criticality regarding the presently claimed process and given that Nagano in view of Guldbrandsen meets the requirements of the claimed

solvent free pressure sensitive adhesive, Nagano in view of Guldbrandsen clearly meets the requirements of the present claims.

85. **Claims 11-12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagano (US 4397916) in view of Nakagawa et al. (US 20010031355 A1).

86. Regarding claims 11-12, Nagano discloses laminated multilayer film but fails to disclose flame retardant filler and carbon black.

87. Nakagawa discloses adhesive tape substrate (title) wherein the tape comprises flame retardant comprising metal hydroxide (paragraph 0046) and char-forming aid that is carbon black (paragraph 0052) in amount on 80-200 phr (paragraph 0051) and 0.5 to 10 phr (paragraph 0052) respectively.

88. It would have been obvious to one of ordinary skill in the art at the time of the invention to use flame retardants of Nakagawa in the film of Nagano to prevent damage during open flame.

89. **Claim 13** is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagano (US 4397916) in view of et al. (US 2003/0129434 A1).

90. Regarding claim 13, Nagano Nagano discloses laminated multilayer film but fails to disclose ethylene copolymer density.

91. Glawe discloses multilayer film wherein it comprise ethylene copolymer in outer layer, which having molecular weight between 0.90 g/cm³ to 0.915 g/cm³ (paragraphs 0011 and 0024), to provide abrasion, puncture and impact resistance (paragraph 0021).

92. It would have been obvious to one of ordinary skill in the art at the time of the invention to use low density ethylene copolymer is Glawe in the film of Nagano to provide abrasion, puncture and impact resistance.

93. **Claim 14** is rejected under 35 U.S.C. 103(a) as being unpatentable over Nagano (US 4397916) in view of Mamish et al. (US 6355344 B1).

94. Regarding claim 14, Nagano Nagano discloses laminated multilayer film but fails to disclose fogging number.

95. Mamish discloses non-fogging pressure sensitive adhesive film wherein the plastic base is halogen free and plasticizer free to obtain low fogging number, e.g. at least 60 (column 3, lines 42-43) for recyclability (column 6, lines 32-40) wherein the example one of Mamish shows that the fogging number of base film is 95 (column 10, lines 25-26).

96. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the concept of low fogging number as taught by Mamish in the film of Nagano for recyclability.

Conclusion

97. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. EP 1097976 and EP 0370424 disclose general concept of adhesive tape but fails to disclose primary and secondary antioxidant.

98. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAMIR SHAH whose telephone number is (571)270-1143. The examiner can normally be reached on 8am to 5pm.

99. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on (571)272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

100. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S.S./
SAMIR SHAH
Examiner, Art Unit 1794
January 12, 2010

/Callie E. Shosho/
Supervisory Patent Examiner, Art Unit 1794

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